Cont

- 3. The method as claimed in claim 1, further comprising subdividing one or more sets within the cache array.
- 4. The method as claimed in claim 1, further comprising using a single least recently used array to replace ways.
- 5. The method as claimed in claim 1, further comprising applying a multiple pseudo least recently used update based on an entry hit.
- 6. The method as claimed in claim 1, further comprising partitioning dynamically the cache array into a direct-mapped cache.
- 7. A device comprising:

a cache memory array dynamically partitioned when multiple memory requests are received from an integrated device having a plurality of processors.

- 8. The device as claimed in claim 7 further comprising:
  an integrated device having a plurality of processors connected to the cache memory array.
- 9. The device as claimed in claim 7 further comprising a main memory device connected to the cache memory array.
- 10. The device as claimed in claim 8 wherein the integrated device includes a graphics processor and a central processing unit.
- 11. A computer-readable medium having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform the method of:

partitioning a cache array dynamically based upon requests for memory from an integrated device having a plurality of processors.

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- 12. The computer-readable medium of claim 11 having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of subdividing one or more ways within the cache array.
- 13. The computer-readable medium of claim 11 having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of subdividing one or more sets within the cache array.
- 14. The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of using a single least recently used array to replace ways.
- 15. The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of applying a multiple pseudo least recently used update based on an entry hit.
- 16. The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of partitioning dynamically the cache array into a direct-mapped cache.
- 17. (Cancelled)
- 18. (Cancelled)
- 19. (Cancelled)
- 20. (Cancelled)
- 21. (Cancelled)